

D.P.U. 91-233-A

Investigation by the Department of Public Utilities of Boston Edison Company's Second Annual Demand-Side Management Reconciliation Report and individual program reports and the Company's Conservation Charge.

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## I. INTRODUCTION

On December 22, 1992, the Department of Public Utilities ("Department") approved a demand-side management ("DSM") settlement agreement ("1992 Settlement") between Boston Edison Company ("BECO" or "Company"), the Attorney General of the Commonwealth ("Attorney General"), the Commonwealth of Massachusetts Division of Energy Resources ("DOER"), the Conservation Law Foundation ("CLF"), the Energy Consortium ("EC"), and the Massachusetts Public Interest Research Group ("MASSPIRG") (collectively, the "Parties"). On June 18, 1993, pursuant to the 1992 Settlement, the Company filed with the Department its Second Annual Reconciliation Report ("Reconciliation Report") (1992 Settlement at 10). The Company filed supporting monitoring and evaluation reports ("M&E reports") with the Department on June 15, 1993.<sup>1</sup> On August 23, 24, 30, and 31, and September 10, 1993, the Department held technical conferences to investigate the Reconciliation Report and M&E reports. On November 2, 1993, pursuant to the 1992 Settlement, the Company filed its estimate of the 1994 conservation charge ("CC") to become effective February 1, 1994 (1992 Settlement at 6). On the same date, the Company filed a third amendment to the 1992 Settlement.<sup>2</sup> On November 24, 1993, the Parties

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<sup>1</sup> On June 18, 1993, the Company also filed a request for a Protective Order to protect from public disclosure the Reconciliation Report and the M&E reports. The Company's request was granted in part and denied in part in a Hearing Officer ruling dated December 23, 1993.

<sup>2</sup> The first and second amendments to the 1992 Settlement were submitted on December 15, 1992, and January 27, 1993, respectively, and approved by the Department on December 22, 1992, and on February 4, 1993, respectively.

submitted to the Department a fourth amendment to the 1992 Settlement.<sup>3</sup>

On December 21, 1993, the Department conducted a procedural conference with the Company and representatives of the Attorney General, CLF, MASSPIRG and DOER ("Non-Utility Parties" or "NUPs") to determine the schedule by which the investigation would proceed. On December 23, 1993, the Hearing Officer issued a Ruling on the Procedural Schedule ("Ruling") which divided the proceeding into three distinct proceedings: the CC proceeding; the M&E proceeding; and the Goals<sup>4</sup> proceeding (Ruling at 3). On December 30, 1993, the NUPs filed an Appeal of the Hearing Officer's Ruling ("NUP Appeal"). The Company filed a response to the appeal on January 6, 1994. On January 21, 1994, the Department issued an order denying the NUP Appeal. D.P.U. 91-233-1.<sup>5</sup>

On January 10, 1994, the Department conducted a hearing at its offices in the first of the three distinct proceedings, the CC proceeding. At the hearing, the motion of the Attorney General and CLF to continue the hearing until February 14, 1994, was denied. In support of its proposed CC, the Company presented two witnesses: Kathleen A. Kelly,

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<sup>3</sup> The Department approved the third and fourth amendments to the 1992 Settlement on December 23, 1993.

<sup>4</sup> Savings goals are the projections of kilowatt/hour ("KWH") and kilowatt ("KW") savings achievable through the Company's DSM programs. Goals are established to govern the implementation of the Company's DSM programs, to estimate and recover lost base revenues, and as a base for the financial incentive calculation (See, 1992 Settlement at 12, 13).

<sup>5</sup> In D.P.U. 91-233-1, at 8, the Department found that a minor modification to the schedule was appropriate. The Department found that the Company was not entitled to reconcile all differences to the CC on February 1, 1995, as implied by the Ruling. Id. Rather, the Department would require the Company to reconcile its CCs during the next fuel charge proceeding after the issuance of an order in the M&E proceeding, if appropriate.

manager of pricing research and evaluation; and Ellen Angley, manager of the demand planning division.

The evidentiary record includes Company responses to 33 information requests and 13 record requests as exhibits. The Company submitted four exhibits. The Company submitted a brief on January 20, 1994, and the NUPs filed a letter in lieu of an initial brief on the same date. The Company filed a reply brief on January 24, 1994.

On January 28, 1994, the Company filed an updated calculation of the CC ("Revised CC filing"), incorporating updated data on 1993 DSM program activity and corrections to erroneous data used in the original CC filing.

This Order addresses the calculation of the CCs applicable to the Company's various rate classes based on the savings estimates submitted by the Company in its Reconciliation Report as well as on the DSM program expenditure levels pursuant to the 1992 Settlement. The Department's investigation in this phase of the proceeding included an assessment of the allocation of program expenditures and savings-related revenues, the calculation of lost base revenues ("LBR"), the financial incentive, and the amortization of DSM program expenditures.

## II. CONSERVATION CHARGE CALCULATION

### A. Introduction

The CCs that the Company proposes to implement for 1994 are similar to those approved in 1993 except that the proposed CCs include (1) the values provided in the terms of the third amendment to the 1992 Settlement (Exh. BE-1, Att. A); (2) estimates of program savings for 1994, based on the savings-per-participant calculations developed in the

Reconciliation Report (i.d.); <sup>6</sup> (3) LBR associated with 1992, 1993, and 1994, as well as a reconciliation of LBR associated with the implementation of DSM programs during 1991 (i.d.); (4) a financial incentive associated with the implementation of DSM programs during 1992 (Tr. at 83-84); and (5) the direct costs and LBR associated with implementation of the Company's Conservation Voltage Regulation ("CVR") program (Exh. BE-1, Att. A).

In general, the Company proposes to increase the CCs for the residential rate classes (i.e., R1, R3 and R4) by 5.1 percent and for the small general use rate classes (i.e., G1 and T1) by 1.7 percent (Revised Exh. BE-1, exh. 1, at 1). The Company also proposes to reduce the CCs for the medium general use rate classes (i.e., G2 and T2) by 9.5 percent and the large general use rate class (i.e., G3) by 13.6 percent (i.d.). Overall, the Company proposes a 6.5 percent reduction in the CC rates (i.d.). The proposed CC rates for 1994 and their corresponding bill impacts are presented in Tables 1 and 2 at the end of this Order.

## B. Allocation of Program Expenditures and Savings-Related Revenues

### 1. Company Proposal

The Company allocated all aspects of the proposed conservation charges, including program expenditures, LBR, the financial incentive, and reconciliation of past program implementation, based on estimates of long-run penetration<sup>7</sup> by customer and rate class for

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<sup>6</sup> The 1993 savings estimates, which were used to develop, in part, the calculation of LBR, are based on the savings estimates approved in the 1992 Settlement and revised for actual participation in 1993 (i.d.).

<sup>7</sup> Long-run penetration may be defined as the percentage of customers participating in a DSM program compared to the total number of customers projected to be eligible to participate in that program during the life of the program.

each DSM program (Exhibit DPU-7-7). The Company stated that, if cost allocations were based on actual participation, changing levels of customer participation across rate classes each year would cause unacceptable volatility in the CCs (Tr. at 73). The Company indicated that the methodology for the proposed allocations is the same as that utilized and implicitly approved in the Company's January 22, 1993 Compliance Filing ("January 1993 Compliance Filing") (Exh. DPU-7-7). The Company further indicated that it continues to utilize the allocations based on long-run penetration to reduce year-to-year, interclass rate volatility (i.d.).

The Department asked the Company to develop an analysis comparing actual revenue recovered through the CCs by rate class to actual DSM program expenditures by rate class (Tr. at 79-80). The Company response revealed that, if the proposed CCs were approved by the Department, certain rate classes would be significantly subsidized by others (R-DPU-9). Specifically, the analysis indicated that the proposed CCs for the residential rate classes and the medium general use rate class are 14 percent larger than they would be if based on actual participation rates over the last three years (i.d.). By contrast, the proposed CCs for the small general use rate class and large general use rate class are 46 percent and 18 percent smaller, respectively, than they would be if based on actual participation rates over the last three years (i.d.).

## 2. Analysis and Findings

The Department has stated that methods of cost allocation should provide a measure of fairness across customer classes. Massachusetts Electric Company, D.P.U. 89-194/195, at 211 (1990) ("MECo"). In MECo, the Department explained that fairness requires that



cost allocations be designed to reflect a company's costs to serve each rate class, directly assigning those costs attributable to providing services to a given class and fairly apportioning common costs when direct assignment is impossible. Id. The Department also has explicitly stated that DSM program costs should be allocated to the rate classes that receive the benefits of those expenditures. Commonwealth Electric Company/Cambri dge Electric Light Company, D.P.U. 91-80 Phase Two-A at 138 (1992) ("Commonwealth").

The Department acknowledges that accurate allocation of future DSM program expenditures can be very difficult because of the inherent uncertainty associated with customer participation. Therefore, the Department finds the Company's proposal to recover 1994 DSM program expenditures and associated LBR based on projected long-run penetration by rate class to be reasonable and appropriate for the 1994 DSM program year. However, because the Company will possess more accurate historical participation information as DSM implementation progresses, the Company should allocate future DSM program expenditures in future CC proceedings based on actual historical participation rates and calculable changes from historical participation rates, rather than on projected long-run penetration rates.

Regarding the recovery of past DSM program expenditures, the Company proposes to reconcile such expenditures with revenues recovered through the CCs based on the same projected long-run penetration rates as were used to allocate 1994 program expenditures. The Department finds that the Company's proposed reconciliation methodology is inconsistent with our requirement in MECo that cost allocations be designed to reflect a company's cost to serve each rate class. Further, the Department finds that the proposed

reconciliation methodology is inconsistent with the terms of the 1992 Settlement, which specify that DSM program expenditures and related costs should be allocated based on the participation of each rate class in BECo's DSM programs (1992 Settlement at 6). However, because information regarding costs to serve and participation rates of each rate class is not contained in the record of this proceeding and because an additional reconciliation may be necessary following the Department's Order in the M&E proceeding, the Department will accept the Company's proposed method of reconciliation of past DSM program expenditures for purpose of calculating CC rates to go into effect through this Order. When such information is available, the Department directs the Company to reconcile, through future CC filings, 1993 and 1994 DSM program expenditures based on actual participation rates, pursuant to the 1992 Settlement. In future CC proceedings, the Department expects the Company to reconcile actual expenditures by rate class with actual revenue recovered by rate class, consistent with our precedent in MECo.

The Department further finds that the Company's proposal to reconcile the LBR and financial incentive components of the CCs based on projected long-run penetration rates is contrary to our mandate in Commonwealth that cost recovery (in this instance, the "costs" associated with the recovery of LBR and incentive payments) should be allocated to the rate classes that receive the benefits of those expenditures. The Company's proposal is also inconsistent with the terms of the 1992 Settlement. Therefore, pursuant to the 1992 Settlement, the LBR and financial incentive components of the Company's CC rates associated with the 1993 and 1994 DSM program implementation should properly reflect actual participation where such information is available. Because information regarding costs

to serve and participate on rates of each rate class is not contained in the record of this proceeding and because an additional reconciliation may be necessary following the Department's Order in the M&E proceeding, the Department will accept the Company's proposed method of reconciliation of LBR and financial incentive payments for purpose of calculating CC rates to go into effect through this Order. However, the Department directs the Company to reconcile 1993 and 1994 LBR and incentive payments based on actual participation rates when that information is available, pursuant to the 1992 Settlement. In future CC proceedings, the Department expects the Company to reconcile LBR and incentive payments based on measured savings by rate class, consistent with our precedent in Commonwealth.

C. Lost Base Revenues

1. Calculation of LBR

a. Company Proposal

The Company has proposed to recover \$7,751,952 through the CC as compensation for base revenues the Company projects it will lose in 1994 due to sales reductions resulting from energy conservation measures ("ECMs") installed in 1992, 1993, and 1994 (Revised Exh. BE-1, exhibits 5-7). The Company also proposes to return to customers LBR collected previously which is in excess of its current estimate of LBR for the years 1991, 1992, and 1993 (Exh. DPU-AG-1-3).

The Company maintains that it should be allowed to recover LBR on the difference

between actual and normalized annual energy savings,<sup>8</sup> a total of 27,617,868 KWH saved in each of the years 1993 and 1994, resulting from ECMs installed in 1991 -- the Company's most recent test year (Revised Exh. BE-1, exhibits 8, 11, and 13; Company Brief at 6-7; RR-DPU-1). The LBR associated with these savings amounts to \$380,842 in 1993 and \$389,051 in 1994. In addition, in calculating its proposed CCs, the Company deducted LBR collected in November and December of 1992 (i.e., after the implementation of base rates using the most recent test-year) due to ECM installations during the test-year (Revised Exh. BE-1, exhibit 13 at 4; Exh. DPU-7-3; RR-DPU-1).<sup>9</sup>

For ECMs installed in the years 1991 and 1992, the Company indicated that it calculated LBR by multiplying installations in each month of each year by monthly energy savings estimates resulting from the impact evaluations submitted to the Department on June 18, 1993, and summarized in the Company's Reconciliation Report (Tr. at 17-18). The resulting total monthly energy savings estimates were then assigned to rate classes using the same allocation factors used to allocate DSM program costs (i.e., projected long-run

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<sup>8</sup> In its first calendar year of operation, an ECM will typically provide fewer KWH savings than in the second and all subsequent years of operation because most ECMs are not installed at the beginning of the year. This gives rise to the difference between actual savings in the year of installation and normalized annual (or "annualized") energy savings to which the Company refers.

<sup>9</sup> The CCs approved by the Department in Boston Edison Company, D.P.U. 90-335-B (1992), allowed the Company to collect LBR due to sales reductions in 1992 resulting from installations in 1991. These CCs were effective from August 1992 through January 1993. However, new base rates (based on the 1991 test-year) went into effect in November 1992. Thus, in the months of November and December 1992 and January 1993 the Company collected LBR for revenues that had not been actually lost, because the new base rates partially incorporated sales reductions due to ECM installations in 1991.

penetration rates) (Tr. at 41-42). The monthly energy savings estimates for each rate class were then multiplied by the corresponding energy base rates to arrive at monthly estimates of LBR (Exh. DPU-AG-2-1).

For 1991 and 1992, a similar methodology was applied to estimate LBR resulting from reduced demand billings in those rate classes with demand charges (Exh. DPU-AG-2-1, Tr. at 56). However, rather than estimate the reduction in demand from each participating customer's individual monthly peak (on which customers' demand charges are based), the Company estimated the total kW reductions resulting from ECMS coincident with its system's monthly peak (Exhs. DPU-7-9, DPU-7-11). Where impact evaluations provided estimates of summer and winter peak reduction, those results were used to determine reductions in monthly peak demand for the system (Exh. DPU-7-9). Where impact evaluations did not develop the kW impacts of a DSM program directly, the Company used energy savings estimates in combination with load shapes from the Company's demand planning department to estimate reductions to the monthly peaks (i.d.). The Company indicated that the energy savings used to determine kW impacts were adjusted to conform to the results of the impact evaluations summarized in the Reconciliation Report (Tr. at 56).

The Company claims that its methodology for determining demand-related LBR underestimates kW billing revenue actually lost for two reasons: (1) the Company did not include the demand impacts of load control programs, since such programs are dispatched only at times of system peak demand, which may not correspond to the peak demands of individual customers; and (2) load monitoring and billing data indicate that the peak demands of individual customers are, on average, larger than their individual kW demands at the time

of system peak demand (Exh. DPU 7-11).

The Company employed a methodology similar to that described above to estimate LBR for the years 1993 and 1994, except that it (1) assumed that DSM program participation in each month was 1/12 of total projected annual participation; and (2) used the savings estimates approved in the 1992 Settlement rather than the per-participant savings estimates identified in the Reconciliation Report (Tr. at 38-41). In the Revised CC filing, the Company updated the 1993 estimates with actual installation and updated savings data (Revised Exh. BE-1, exhibits 6 and 9; RR-DPU-4).

The Company also proposed to increase its CCs to reflect a total of \$221,327 for LBR resulting from the implementation of its CVR program in 1994 (Revised Exh. BE-1, exhibit 1 at 1). The Company indicated that this is the first filing in which it has requested LBR on CVR (Tr. at 59). The Company argues that there is no reason not to allow recovery of CVR-related LBR, because CVR reduces the Company's revenues in the same way that any other DSM measure does (Company Brief at 5-6).

b. Position of the Non-Utility Parties

The NUPs request that the Department make no findings at this time on the appropriateness of the collection of LBR for sales reductions due to CVR program implementation (NUP Letter at 1). The NUPs argue that it would be inappropriate for the Department to address this issue now because (1) the Department did not provide adequate notice to the parties that this issue would be addressed in this proceeding; and (2) CVR is a supply-side program and should therefore not be eligible for LBR (id. at 2).

c. Analysis and Findings

i . Introduction

In the past, the Department found that the Company's request for recovery of LBR was appropriate and consistent with Department precedent. Boston Edison Company, D.P.U. 90-335, at 127-129 (1992), ("D.P.U. 90-335"). In that Order, the Department required the Company to recalculate its estimates of LBR excluding savings resulting from programs addressing new construction, on the grounds that such programs do not reduce sales from test-year levels. Id.

ii . LBR resulting from Energy Savings

The record indicates that, in calculating LBR resulting from 1992 and 1993 DSM program installations, the Company employed the savings estimates in the Reconciliation Report and used actual installation data to project monthly kWh savings in 1994. In calculating LBR associated with installations in 1994, the record indicates that the Company assumed that projected annual program participation and resulting kWh savings would be spread out evenly over the year. Further, the record indicates that the Company excluded kWh savings due to its Residential and Commercial/Industrial New Construction programs from its calculation of lost base energy revenues. The Department finds these assumptions and the Company's calculations to be reasonable. Therefore, the Department approves the inclusion of \$5,393,275 in lost base energy revenues in the calculation of the 1994 CC. The Department notes, however, that this amount is subject to reconciliation following the Department's Order in the M&E proceeding.

iii . LBR Resulting from Demand Reductions

In D.P.U. 90-335, at 127-129, the Department expressed concern about the

Company's calculation of LBR associated with demand reductions using estimates of KWh reduction coincident with system peak rather than estimates of KWh reduction to customers' individual monthly peaks. The Department directed the Company to address this issue as part of the 1992 C&LM preapproval filing. Id. Although the Company did not address the relationship between individual customer peak and coincident system peak in its 1992 C&LM preapproval filing (which led to the 1992 Settlement), it has presented evidence in this case indicating that the methodology it uses to determine LBR associated with demand charge reductions is likely to underestimate actual revenues lost.

The record indicates that for LBR due to 1992 and 1993 installations, the Company employed the savings estimates in the Reconciliation Report, and used actual installation data to project the monthly KWh savings in 1994. In calculating LBR associated with installations in 1994, the record indicates that the Company assumed that projected annual program participation will be spread out evenly over the year. Further, the record indicates that the Company has excluded from its calculation of lost demand revenues the KWh savings due to its Commercial/Industrial New Construction program. The Department finds this methodology to be acceptable. Therefore, the Department approves the inclusion of \$2,358,677 in lost demand revenues in the calculation of the 1994 CC. Again, the Department notes that the approved lost demand revenues are subject to reconciliation following the Department's Order in the M&E proceeding.

#### iv. LBR on Savings Due to Conservation Voltage Regulation

The Department finds that the Company has not supported its estimate of LBR due to the CVR program with documentation indicating the energy or demand savings projected to



occur in 1994 as a result of the program, nor has it presented a description of the methodology it used to develop its savings estimates. Accordingly, the Department directs the Company to remove from its calculation of the 1994 CC the \$221,327 it has proposed for CVR-related LBR. However, the Department invites the Company to provide in the M&E proceeding documentation to support its CVR savings estimates. Because this is an issue of first impression for the Department, all parties will have another opportunity in the M&E proceeding to argue whether the Company should be permitted to recover LBR attributable to CVR-related savings.

v. LBR on Annualized Test-Year Savings

The Company claims that the energy savings due to ECM installations in 1991 (its most recent rate-case test year) are not fully reflected in current base rates because these ECMs were in place for only a portion of the test year. The Company claims that, as a result, it continues to lose revenue associated with the difference between annualized savings due to ECM installations in 1991 and actual savings in that year.

In the past, the Department has not allowed recovery of LBR due to measures installed prior to the end of the most recent test year. However, measures installed during the test year will generate savings only during that portion of the year in which they are in place. As a consequence, the test-year sales from which base rates are derived would reflect only a portion of the savings levels that would be expected from those measures in the course of a full year. Revenues associated with the difference between annualized and actual test-year savings will therefore be lost in each subsequent year, until new base rates are established. The Department finds that the Company's rationale for this adjustment is

persuasive. Accordingly, the Department finds that it is appropriate to allow recovery of the lost base revenues associated with these savings.

2. Adjustment to LBR to Reflect Actual Avoided Costs

a. Introduction

In the instant proceeding, the Company requested to recover LBR based on a calculation using the same methodology that was substantively consistent with that approved in D.P.U. 90-335, at 127-129. In that proceeding, the Company multiplied on- and off-peak energy and on-peak demand reductions due to DSM program implementation by the associated energy and demand rates specific to each rate class in which the DSM savings occur. Id. at 114-115. During hearings in the instant proceeding, the Department investigated whether it is appropriate to adjust the amount of LBR that the Company is permitted to recover to reflect the costs that are avoided by the Company as a consequence of the implementation of DSM programs (Tr. at 42-54). Specifically, the Department inquired whether transmission and distribution ("T&D") costs are avoided in the near term, and if so, whether such avoided costs should be subtracted from the Company's calculation of recoverable LBR (id. at 44).

b. Company Position

The Company asserted that avoided T&D costs would develop over a significantly longer period of time than the life of the Company's DSM programs (id. at 50). Specifically, the Company stated that T&D investments may be avoided "in five or ten years down the road if we have to continue building for peak again" then added "[b]ut right now it doesn't appear to be the case in the short term" (id.). Further, the Company indicated that a

significant T&D investment was scheduled for the town of Acton, and that the Company had examined whether DSM could be implemented to defer the investment (i.d. at 50). The Company concluded that DSM could not reduce the capacity requirement of the Acton facility to defer the additional T&D investment (i.d.). The Company also provided an analysis that indicated that DSM implementation avoided only minor investments in the Company's T&D facilities in the short-term (RR-DPU-5).

c. Analysis and Findings

In D.P.U. 86-36-F at 35-36 (1988), the Department stated that it would entertain proposals for lost revenue adjustments if a company can demonstrate that "the successful performance of its C&LM programs will result in sales erosion that adversely affects revenues in a significant, quantifiable way." In WMECo at 104, 105, the Department found that "an adjustment for lost revenues is appropriate even if a company experiences growth in sales" and that "an adjustment for lost revenues would simply restore the assumed relationship between sales levels and revenue requirements that were used in setting the rates before an electric company began achieving savings from its C&LM programs."

In WMECo at 106, however, the Department indicated that recovery of LBR might only be necessary for the short term because, in the long term, companies will be able to adjust their operating costs to reflect the reduction in sales. Specifically, the Department stated that

when viewed from a long-term planning perspective, electric companies will experience variable O&M [operation and maintenance] costs that are not reflected through the fuel charge. However, from the short term (e.g., less than one year) perspective, C&LM does not appear to result in significant variable O&M savings for a Company's marginal generating facilities.

Id. In Commonwealth Electric Company/Cambri dge Electric Li ght Company, D.P.U. 93-15/16, at 9 (1993), the Department reaffi rmed that aspect of the WMECo deci si on, and di rected the compani es to "provi de an analysi s of the fi xed costs actual ly foregone due to C&LM program i mplementati on, i ncludi ng an analysi s of non-fuel vari able costs that may go unrecovered due to reduced energy sales."

Whi le duri ng the course of proceedi ngs the Department i nvesti gated an al ternati ve approach to cal cul ati ng LBR (i .e., to adj ust LBR to reflect the costs avoi ded by the Company as a consequence of i ts i mplementati on of DSM programs), the record does not contai n suffi ci ent i nformati on to support a fi ndi ng that would al ter our current poli cy. Accordi ngly, the Department wi ll al low the Company to col lect LBR based on the proposed methodol ogy, whi ch has been approved i n previ ous proceedi ngs, subject to any di recti ves i n Secti on C.3.a through Secti on C.3.c of thi s Order. However, the Department i ntends to i nvesti gate further thi s aspect of LBR cal cul ati on and di rects the Company to provi de an analysi s wi th the next annual CC fi li ng, associ ated wi th a Department Order schedul ed for February 1, 1995, of the fi xed costs actual ly foregone due to the i mplementati on of the Company's DSM programs.

#### D. Fi nanci al I ncenti ve

##### 1. Company Proposal

The Company proposes to col lect an i ncenti ve payment of \$512,177 for successful i mplementati on of i ts DSM programs duri ng 1992 through the 1994 CCs (Revi sed Exh. BE-1, exh. 2, at 1). The i ncenti ve i s cal cul ated as fi ve percent of the net benefi t<sup>10</sup>

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<sup>10</sup> Net benefi t i s determi ned by subtracti ng al l costs associ ated wi th i mplementi ng DSM (conti nued...)

resulting from the implementation of DSM measures associated with DSM program expenditures beyond those made pursuant to the 1989 Settlement<sup>11</sup> (Exh. DPU-AG-1-2). The Company asserts that it spent a total of \$51,734,851 on DSM implementation in 1992, of which \$25,469,258 was expended pursuant to the 1989 Settlement (i.d.). Therefore, the Company states that it is entitled to receive a financial incentive payment on the net benefit from the remaining DSM expenditures of \$26,265,593 (i.d.). According to the Company, the savings estimates used to calculate the proposed incentive payment were based on the 1993 Reconciliation Report submitted to the Department in June 1993 (Tr. at 83-84).

## 2. Analysis and Findings

The Department finds the Company's proposal to collect an incentive payment within the 1994 CC for the successful implementation of DSM programs during 1992 to be

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<sup>10</sup>(...continued)

programs (e.g., incentive payments to customers, contractor costs, Company labor costs, and M&E costs) from gross benefits (e.g., avoided fuel, avoided capacity, avoided T&D, and the monetized value of avoided environmental externalities) associated with implementing the DSM programs. Gross benefits are determined by multiplying all avoided costs calculated on a per-KW and per-KWH basis by the savings estimates determined on a per-KW and per-KWH basis. D.P.U. 90-335, at 21.

<sup>11</sup> On October 31, 1989, the Department approved a comprehensive settlement ("1989 Settlement") resolving three Boston Edison proceedings before the Department: (1) D.P.U. 88-28; (2) D.P.U. 88-48; and (3) D.P.U. 89-100. Pursuant to the terms of the 1989 Settlement, the Company was required to implement DSM programs with expenditures totaling \$75 million over a period of three years, ending in 1992, to be funded by the Company's shareholders (1989 Settlement, Section VII.B.). The 1989 Settlement provided that recommendations regarding programs and expenditures be made by a Settlement Board, consisting of representatives of the Attorney General, the Executive Office of Energy Resources (now DOER), MASSPIRG, State Senator William Golden, and BECo (i.d., Section VII.E.).

consistent with the Department's Order in D.P.U. 90-335. Therefore, the Department approves the collection of the proposed incentive payments through the 1994 CC, based on the savings estimates identified in the Reconciliation Report. However, in accordance with D.P.U. 91-233-1, the incentive payment for 1992 program implementation is subject to reconciliation following the Department's Order in the M&E proceeding regarding the 1992 savings estimates.

E. Amortization Schedule

1. Company Proposal

As part of its filing in this proceeding and pursuant to the 1992 Settlement, the Company presented a six-year amortization schedule which it proposes to apply to DSM program expenditures made during 1994 (Exh. BE-1, Att. A, at 3). Of the total DSM program budget of \$57,955,272 for 1994, the Company proposes to recover \$20,295,190 through the 1994 CCs, and to amortize the balance of \$37,660,082 over the following six years (i.d.). The Company also proposes that its 1994 CCs collect one-sixth of the unamortized balances associated with DSM programs implemented during 1992 and 1993, as well as a return on all unamortized balances and any taxes that would have to be paid on that return (i.d.; Exh. DPU-AG-1-4). The proposed cumulative unamortized balance, including anticipated 1994 program expenditures, equals \$75,889,759. The proposed return on that balance equals \$7,842,681. Taxes on that return would equal \$2,517,748 (Exh. DPU-AG-1-4).

The Company calculated its proposed return on the unamortized balance by

multi plying i ts wei ghted average cost of capi tal<sup>12</sup> by the unamorti zed bal ance as of January 1, 1994. However, the Company has proposed to collect one-si xth of the unamorti zed bal ance (i .e., the annual amorti zed amount) over the course of 1994 (Ir. at 97). The Company submi tted an analysi s that recal cul ated the return on a monthly basi s reflecti ng changes to the unamorti zed bal ance due to revenues that would be collected each month through the 1994 CCs (Exh. DPU-9-3). The analysi s i ndi cated that the total return on the unamorti zed bal ances for the twel ve month peri od would be \$7,123,278, a decrease of \$719,403 relati ve to the Company's i ni ti al proposal (i d.). Si mi larly, the analysi s i ndi cated that the return on the unamorti zed bal ance associ ated wi th the DSM programs i mplemented duri ng 1993 would be \$4,345,850, rather than the \$4,753,448 as previ ously determi ned and al ready collected by the Company (i d.; Exh. DPU-AG-1-4). A recal cul ati on of the taxes that would have to be pai d on those revi sed returns i ndi cated that the proposed taxes for 1993 and 1994 are hi gher than those calcul ated on a monthly basi s by \$136,063 and \$244,365, respecti vely (RR-DPU-11).

The Company stated that the proposed method of amorti zati on was the same as that proposed and approved i n the 1992 Sett l ement (Ir. at 97). Al though the Company states that the amorti zati on schedul e was based on an "agreed-upon methodol ogy" devel oped through the 1992 Sett l ement, the Company al so admi ts that nei ther the 1992 Sett l ement nor the Order approvi ng the 1992 Sett l ement expl i ci tly menti ons or approves the methodol ogy associ ated

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<sup>12</sup> The Company i denti fi ed i ts wei ghted average cost of capi tal as 10.33 percent, based on 51.47 percent debt at a 9.69 percent return, 9.9 percent preferred stock at an 8.16 percent return, and 38.63 percent common stock at an 11.75 percent return (Exh. DPU-AG-1-4).

with the return on unamortized balance (i.d. at 97-98). The Company contends that the proposed amortization schedule and associated methodologies submitted as part of the 1992 Settlement cannot now be altered (i.d. at 98; Company Brief at 5).

## 2. Analysis and Findings

The Department notes that the record in this proceeding indicates that the Company's proposed amortization schedule, specifically the proposed return on unamortized balances and related taxes, does not accurately portray the recovery of costs through the CC. The Department acknowledges, however, that the 1992 Settlement approved by the Department included the same amortization schedule that was proposed by the Company in this proceeding. Therefore, the Department finds that the proposed amortization schedule is consistent with that in the approved 1992 Settlement, and that it would not be appropriate to make changes to the amortization schedule during the term specified by the 1992 Settlement. However, in future DSM proceedings, the Department expects that proposed schedules for the amortization of DSM program expenditures will accurately reflect unamortized balances and the monthly recovery of related costs.

## III. ORDER

Accordingly, after due consideration, it is

ORDERED: That the Company's proposal to recover 1994 DSM program expenditures and associated LBR based on projected long-run penetration by rate class is approved for the 1994 DSM program year, provided that, in future CC proceedings, the Company allocate future DSM program expenditures based on actual historical participation rates and calculable changes from historical participation rates, rather than on projected long-



run penetration rates; and it is

FURTHER ORDERED: That the Department will accept the Company's proposed method of reconciliation of past DSM program expenditures for purpose of calculating CC rates to go into effect through this Order provided that, when such information is available, the Company must reconcile 1993 and 1994 DSM program expenditures based on actual participation rates, pursuant to the 1992 Settlement. In future CC proceedings, the Department expects the Company to reconcile actual expenditures by rate class with actual revenue recovered by rate class; and it is

FURTHER ORDERED: That the Department will accept the Company's proposed method of reconciliation of LBR and financial incentive payments for purpose of calculating CC rates to go into effect through this Order provided that the Company must reconcile 1993 and 1994 LBR and incentive payments based on actual participation rates when that information becomes available, pursuant to the 1992 Settlement. In future CC proceedings, the Department expects the Company to reconcile LBR and incentive payments based on measured savings by rate class; and it is

FURTHER ORDERED: That the Company's proposal to include \$5,393,275 in lost base energy revenues in the calculation of the 1994 CC is approved, subject to reconciliation following the Department's Order in the M&E proceeding; and it is

FURTHER ORDERED: That the Company's proposal to include \$2,358,677 in lost demand revenues in the calculation of the 1994 CC is approved, subject to reconciliation following the Department's Order in the M&E proceeding; and it is

FURTHER ORDERED: That the Company must remove from its calculation of the 1994 CC the \$221,327 it has proposed to recover as attributable to CVR-related lost base revenues, and must provide in the M&E proceeding documentation sufficient to support its CVR savings estimates; and it is

FURTHER ORDERED: That the Company's proposal to recover LBR based on the annualized savings due to DSM program implementation in 1991 is reasonable; and it is

FURTHER ORDERED: That the Company provide an analysis for the next annual CC filing, scheduled for February 1, 1995, of the fixed costs actually foregone due to the implementation of the Company's demand-side management programs; and it is

FURTHER ORDERED: That the Company's proposal to collect a financial incentive payment within the 1994 CC for 1992 DSM program implementation, based on the savings estimates reported in the Reconciliation Report, is approved, subject to reconciliation following the Department's Order in the M&E proceeding; and it is

FURTHER ORDERED: That the Company's proposed amortization schedule is consistent with that in the approved 1992 Settlement, and that it would not be appropriate to make changes to the amortization schedule during the term specified by the 1992 Settlement, provided that, in future DSM proceedings, proposed schedules for the amortization of DSM program expenditures accurately reflect unamortized balances and the monthly recovery of related costs; and it is

FURTHER ORDERED: That the Company shall comply with all directives in this Order.

By Order of the Department,

TABLE 1 - Proposed and Current CCs

Rate Classes	Proposed CCs (2/94 - 1/95)	Current CCs (2/93 - 1/94)	Percent Change in CCs
R1/R3/R4	\$0.00353	\$0.00336	5.1%
R2 (Low Income)	\$0.00000	\$0.00000	0.0%
G1/T1	\$0.00492	\$0.00484	1.7%
G2/T2	\$0.00496	\$0.00548	-9.5%
G3	\$0.00299	\$0.00346	-13.6%
S1/S2/S3 (Street Lighting)	\$0.00000	\$0.00000	0.0%
Total of all classes	\$0.00404	\$0.00432	-6.5%

(Revised Exh. BE-1, exh. 1, at 1).

TABLE 2 - Average Bill Impacts Associated with Proposed CCs

Rate Class	Average KWH Usage	Average KW Usage	Current Bills	With Proposed CC Rates	Dollar Increase	Percent Increase
R1	500	N/A	\$62.32	\$62.40	\$0.08	0.13%
R3	1,000	N/A	\$114.19	\$114.36	\$0.17	0.15%
G1	350	N/A	\$50.58	\$50.61	\$0.03	0.06%
G2	4,000	12	\$436.87	\$434.79	-\$2.08	-0.48%
T2	96,000	295	\$10,609	\$10,559	-\$49.92	-0.47%
G3	245,000	563	\$21,503	\$21,388	-\$115.15	-0.54%

(id. at 2).